LESSONS LEARNED

from

"TESTING THE WATERS FOR Y2K"

During the last week of July and the first three weeks of August, 1999, a number of drinking water utilities and at least one wastewater utility conducted Y2K testing, and many reported the results to their local newspapers. In addition to publicizing their readiness status to their customers, a number of these utilities documented lessons that had been learned during this experience to assist other utilities as they conduct their own preparation activities.

"Testing the Waters for Y2K" was a partnership effort involving these utilities, their associations and the U.S. Environmental Protection Agency (EPA). EPA has included some of the lessons learned on this web page; one of the lessons is actually from a real life experience that happened before "Testing the Waters for Y2K" took place (Shorelands Water Company, Haslett, NJ).

Lessons learned based on Y2K preparation and testing experiences are welcome from other utilities as well ; EPA will be glad to add text to this site or link to the originating site depending on a utility's preference. To add or allow us to link to your lessons learned, please call or e-mail Barry Benroth of EPA's Office of Water (202-260-2205; benroth.barry@epa.gov).

We also invite you to use the information from three drinking water and wastewater case studies that were prepared in cooperation with the California State Water Resource Control Board, 3 California drinking water and wastewater utilities, EPA's Region 9 Office in San Francisco, CA, and EPA Headquarters in Washington, DC.

Y2K Lessons Learned:

1. Do your own testing (if possible) and do not rely completely on the product manufacturer. We were made aware of a couple of situations where a vendor that supplied a product was contacted regarding the Y2K readiness of their product and they claimed it was Y2K ready. When testing took place, the product failed. (Illinois American; East St. Louis Plant)

2. Be aware of potential problems that could occur after your testing when dates are returned to the current date. The rolling back of the date could potentially cause problems with your system. Work on a mock setup of your system if possible. (Illinois American; East St. Louis Plant)

3. During contingency plan testing, we learned that many additional staff are needed to operate a plant averaging 254 MGD to control various stations in a manual mode. (Metropolitan Water Reclamation District of Greater Chicago; Calumet Water Reclamation Plant)

4. Piping within the plant, such as sludge lines, was identified as a concern, particularly if the weather is very cold and a power outage occurs. The plant has ordered portable and back-up generators (as a safeguard against problems with the piping). (Metropolitan Water Reclamation District of Greater Chicago; Calumet Water Reclamation Plant)

5. Because the communication system was a concern, walkie talkies were used during the test. (Metropolitan Water Reclamation District of Greater Chicago; Calumet Water Reclamation Plant)

6. In an general emergency situation in a locality (rolling brownouts and blackouts and power surges), communications channels did not work, because the people needed (local authorities, police, etc.) were not there (due to the need to respond to other problems demanding their attention). Each utility should reinforce its emergency communications links between themselves, the city/county government, and the local power companies. (Shorelands Water Co., Haslett, NJ)

7. After the clocks are advanced, check each monitored function against what you would expect to be normal operations. For example, are pumping rates and pressure within normal ranges, are all valves and gates open that should be open or closed if they should be closed, are chemical feed rates normal, are pumps and motors that should be operating actually working, etc. (Fairfax County Water Authority)

8. In some automated systems, the large surge of new data, caused by advancing the clock, can overload in the computer buffer. To avoid overloading the buffer, it may be necessary to turn the computer off and reboot the system after the new time is set. In setting the clock forward be sure to leave enough time before the rollover for the system to reboot and come back on line. (Fairfax County Water Authority)

To add or link to your "lessons learned," please call or e-mail Barry Benroth of the EPA Office of Water -- 202-260-2205; benroth.barry@epa.gov.